

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for soft-programming an electrically erasable nonvolatile memory device, comprising:

performing a first soft-programming with a first soft-programming multiplicity of memory cells in given operating conditions that are based on a maximum current which is available for writing operations and which can be generated within the memory device, the first soft-programming multiplicity corresponding to simultaneous soft-soft-programming of a first plurality of memory cells of the memory device; and

performing a second soft-soft-programming of memory cells with a second soft-programming multiplicity differing from the first soft-programming multiplicity in a case where said given operating conditions are not presentdepleted memory cells are still present among the first plurality of memory cells after said first soft-programming, the second soft-programming multiplicity corresponding to simultaneous soft-soft-programming of a second plurality of memory cells of the memory device, said first and second soft-programming being performed without increasing said maximum current which is available for writing operations and which can be generated within the memory device.

2. (Currently Amended) The soft-programming method according to claim 1 wherein said first soft-programming multiplicity is greater than that a programming multiplicity of memory cells used for writing data in the memory device.

3. (Currently Amended) The soft-programming method according to claim 1 wherein said first soft-programming multiplicity is twice than a programming multiplicity of memory cells that used for writing data in the memory device.

4. (Original) The soft-programming method according to claim 1 wherein said second soft-programming multiplicity is smaller than said first soft-programming multiplicity.

5. (Currently Amended) The soft-programming method according to claim 1 wherein said second soft-programming multiplicity is equal to that-a programming multiplicity of memory cells used for writing data in the memory device.

6. (Previously Presented) The soft-programming method according to claim 1 wherein said first soft-programming multiplicity is used in a case where a current absorbed during soft-programming carried out with said first soft-programming multiplicity meets a given relation.

7. (Previously Presented) The soft-programming method according to claim 6 wherein said relation is defined by a condition that the current absorbed during soft-programming carried out with said first soft-programming multiplicity is either smaller or equal to a threshold current.

8. (Currently Amended) The soft-programming method according to claim 6 wherein said threshold current is equal to a-said maximum current which is available for writing operations and which can be generated within the memory device.

9. (Currently Amended) An electrically erasable nonvolatile memory device, comprising:

first and second pluralities of memory cells; and
soft-programming means for operating with a first soft-programming multiplicity of memory cells simultaneously on the first plurality of memory cells in given operating conditions that are based on a maximum current which is available for writing operations and which can be generated within the memory device and for operating with a second soft-programming multiplicity of memory cells, simultaneously on the second plurality of memory

cells, the second soft-programming multiplicity differing from the first soft-programming multiplicity and being performed in a case where depleted memory cells are still present among the first plurality of memory cells after said first soft-programmingsaid given operating conditions are not present.

10. (Currently Amended) The memory device according to claim 9 wherein said first soft-programming multiplicity is greater than that-a programming multiplicity of memory cells used for writing data in the memory device.

11. (Currently Amended) The memory device according to claim 9 wherein said first soft-programming multiplicity is twice that-a programming multiplicity of memory cells used for writing data in the memory device.

12. (Original) The memory device according to claim 9 wherein said second soft-programming multiplicity is smaller than said first soft-programming multiplicity.

13. (Currently Amended) The memory device according to claim 9 wherein said second soft-programming multiplicity is equal to that-a programming multiplicity of memory cells used for writing data in the memory device.

14. (Previously Presented) The memory device according to claim 9 wherein said first soft-programming multiplicity is used in a case where a current absorbed during soft-programming carried out with said first soft-programming multiplicity meets a given relation.

15. (Previously Presented) The memory device according to claim 14 wherein said relation is defined by a condition that the current absorbed during soft-programming carried out with said first soft-programming multiplicity is smaller or equal to a threshold current.

16. (Currently Amended) The memory device according to claim 14 wherein said threshold current is equal to ~~a-said~~ maximum current which is available for writing operations and which can be generated within the memory device.

17. (Canceled)

18. (Currently Amended) A method for soft-programming an electrically erasable nonvolatile memory device, comprising:

performing a first soft-programming of a first plurality of memory cells simultaneously;

performing a second soft-programming of a second plurality of memory cells simultaneously that is fewer than the first plurality of memory cells if a current ~~drawn during needed for~~ the first ~~soft~~-soft-programming is equal to or greater than a maximum current that can be generated during a programming operation threshold amount; and

performing a third soft-programming of a third plurality of memory cells simultaneously that is equal in number to the first plurality of memory cells if the current ~~drawn during needed for~~ the first ~~first~~-soft programming is less than the ~~threshold amount~~maximum current.

19. (Currently Amended) The method of claim 18 wherein the first plurality is 32 ~~bits-memory cells~~ that are soft-programmed simultaneously and the second plurality is 16 ~~bits-memory cells~~ that are soft programmed simultaneously.

20. (Currently Amended) The method of claim 18 wherein the ~~threshold amount of current is a~~ maximum current that can be generated during ~~a-the~~ programming operation is a maximum current that can be generated by an on-chip charge pump of the memory device.

21. (Currently Amended) The method of claim 18 wherein the first plurality that are soft-programmed simultaneously is double a number bits that is allowed by a power capability of programming during a normal program operation.

22. (New) The method of claim 18 wherein performing the second soft-programming includes performing the second soft-programming if depleted memory cells among the first plurality of memory cells are present after performing the first soft-programming.